

Iowa Department of Natural Resources
Environmental Protection Commission

ITEM

10

DECISION

TOPIC

Contract - Nonpoint Source Pollution Control Project

Commission approval is requested for the following one-year contract for a nonpoint source (NPS) pollution control project. The funds for this contract will come from the FFY2001 and FFY04 Section 319 grant. Funding from other state and federal programs is also being used to support this project.

Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation (IDALS/DSC), Iowa Learning Farms Project, \$98,512

This contract will support an ongoing project facilitated by Iowa State University Extension and the Leopold Center for Sustainable Agriculture, co-funded by the DNR Section 319 program, the USDA Natural Resources Conservation Service (NRCS), and the IDALS Division of Soil Conservation. The primary objectives of the project are to increase awareness and adoption of conservation tillage systems and other conservation practices among Iowa farmers, by working with 30 farmer cooperators statewide who conduct field demonstrations and participate in peer-to-peer networking as part of the project's targeted educational programming.

The project will involve water quality modeling for estimating pollutant load reductions, as well as water quality monitoring, to document the effectiveness of the practices demonstrated at demonstration sites. The project will also prepare education materials for distribution to farmers statewide related to the social, agronomic, environmental, and economic aspects of crop residue management and other farm conservation practices.

The project aims to increase adoption of the demonstrated practices among Iowa farmers, and reduce sediment and nutrient loading from croplands to surface waters in the state. Contract funds will be used to support project staff, associated project costs, demonstration site establishment and monitoring costs.

Wayne Gieselmann
Environmental Services Division
March 18, 2008



Project Title: *Iowa Learning Farms: Building a Culture of Conservation-Farmer to Farmer: Iowan to Iowan*

Project Vision Summary

Iowa has one of the most altered landscapes in the United States. How many land users really understand the dynamics of their land use and the consequences of their land use management on the natural resources?

Two hundred years ago over 81 percent of Iowa was covered by perennial tall grass prairie and wetlands—an ecological system best adapted to the region's higher precipitation periods during the spring and fall. Today, much of the state is covered with annual row crops. Corn and soybeans use little water in the spring and fall; reduced crop water usage during these high precipitation periods increases the chance that water “leaks” out of the system as surface water runoff or subsurface drainage. Each drop of water that “leaks” out of the system via surface water runoff takes important nutrients and soil particles with it and each drop of water that “leaks” out of the system via subsurface drainage takes important nutrients with it. The result is loss of soil and natural fertility, and impaired water bodies from our small creeks flowing through the major tributaries to the Gulf of Mexico. Our dominant agricultural row crop system is a “leaky” system compared to the more perennial vegetation system of the past. The Iowa Learning Farm partners with farmers to find ways to work more effectively with Iowa's natural ecology while using innovative practices to keep water, nutrients, and soil where they belong for generations to come.

As our nation pursues energy independence and economic growth through the production of plant-based food, fuels and fiber, the full scope of land management must be considered in order to improve water and soil quality. Most Iowans agree it is important to leave the land in better shape for future generations. Improving water and soil quality is possible, if we act now.

The Approach

The Iowa Learning Farm (ILF) takes a grassroots approach by working with 30 farmer cooperators to demonstrate and promote innovative ways to help all Iowa citizens have an active role in protecting and enhancing our state's natural resources. Using the idea that “seeing is believing”, ILF farmers are demonstrating cropping techniques that improve the water and soil quality on their land while remaining profitable. In addition to the farmer cooperators, ILF involves a broad set of stakeholders, partner organizations, and agencies. Our vision is **Building a Culture of Conservation ~ Farmer to Farmer: Iowan to Iowan**.

A **Culture of Conservation** involves strengthening our commitment to a set of values, beliefs, and attitudes about the importance of natural resources to our standard of living and quality of life. Conservation values must be incorporated into our everyday actions and decisions. Natural resource conservation must be



ingrained in the fabric of all farm system decisions from input suppliers to consumers. It means ensuring that the benefits and costs of the biomass economy are shared throughout the system if it is to remain sustainable. The ILF aims at instilling and reinforcing conservation values and beliefs through educational efforts and recognition of appropriate conservation behaviors.

The importance of positive role models is an integral part of the **Culture of Conservation**. Identifying and using recognized conservation farmers as spokespeople for ILF's objectives is a unique component in bringing about durable change in how we use the landscape. Positive peer messages on the importance of appropriate use of land and water resources will be more effective than punitive messages of regulation or the enticement of incentives. Fostering a Culture of Conservation based upon voluntary adherence to values of stewardship because they want to change will be more effective and enduring than imposed regulations or temporary incentives.

Bringing about a renewed commitment to this **Culture of Conservation** will require extensive use of opinion leaders and positive role models statewide. Rather than an expert-led initiative, the Iowa Learning Farm is based upon producer involvement in all phases of the process to discover what works best on their farm. This process assumes that most farmers and landowners want to protect their natural resources. Through producer involvement in testing alternative production models, drawing upon their personal experiences and the experiences of their neighbors and peers, it is expected that higher rates of adoption will occur. ***The strength of ILF is that we combine science-based information from Iowa State University and other research institutions with the peer-to-peer messages.***

A **Culture of Conservation** is providing awareness, educational opportunities, and peer and social support to recognize those doing a good job of conservation farming and to encourage others to begin conservation farming. Building upon community development models of social change, ILF encourages this Culture of Conservation by drawing upon local leadership, observed benefits of conservation, and the power of peer messages and peer pressure to motivate change. Innovative farmers seeking better answers, attempting new and improved practices, and sharing the results will drive this farmer-to-farmer project of change for Iowa.

Improved Soil and Water Quality

A **Culture of Conservation** encourages us to more fully appreciate our environment and natural resources—not take them for granted. The overall goal of the ILF project is to increase the understanding between individual farm-level decisions and the aggregate impact on the environment. This includes an entire set of proven practices such as residue management, reduced tillage, buffer strips, cover crops and stream bank stabilization. Adoption of these practices is dependent upon increased producer understanding of the connection between their individual practices and how they contribute to improved sustainability statewide.



While producer education and understanding of a Culture of Conservation are central to ILF, we recognize that half of Iowa's land is operated by someone other than the owner, making it is critical that landowners become involved in the project. In addition, farm management firms and lenders are key to our goal of building awareness of the **Culture of Conservation**.

To increase adoption of conservation practices, a targeted educational program will be developed that includes a large peer-to-peer network and an extensive mass media component. The project includes sponsoring and participating in numerous educational programming events as well as print and electronic educational materials. Information is communicated through peer messages and various media featuring local spokespeople, government agencies, and educators. The advantage of having Iowa State University Extension facilitate this project is that we can combine the local expertise with research-based information.

Agronomic, economic, environmental, and social aspects related to implementation of conservation practices are integrated within the project. To help achieve our objectives, the ILF will build on synergistic relationships developed in the first four years of the project. We will continue to use traditional approaches of off-season meetings, field days, and small working groups. We also will work to develop strong local networks with significant involvement of the innovative cooperators who are a part of the ILF project as we continue to develop a statewide educational campaign.

We will further enhance the water quality modeling component of the ILF project that began in 2007. Future modeling will focus on working with selected watershed groups to estimate pollutant load reductions from the implemented practice changes and to develop scenarios they can use for local planning. In working with these watershed groups, pollutant-loading information will be generated that can be used as guides for other watershed organizations throughout the state.

The resources and infrastructure developed as part of the ILF project can be leveraged to provide an effective delivery mechanism for emerging technologies and other important issues such as row crop residue harvest for biofuels, cover crops and perennial living mulch, and phosphorous transport from cropped landscapes. The recently-funded Conservation Innovation Grant on Stewardship in the Bioeconomy: An Iowa Market Based Model, which begins fall 2007, illustrates an example of the significant leveraging capacity of ILF.

Iowa Learning Farm Vision Summary

Iowa Learning Farm is a statewide initiative involving an increasing number of farmer cooperators, partners, and project personnel with the following objectives:

- Build a **Culture of Conservation** that strengthens our individual and collective commitments to a set of values, beliefs, and attitudes about the centrality of natural resources to our standard of living and quality of life,



2008 ILF Work Plan

- Expand trial field demonstrations so producers can evaluate the agronomic and economic information, share local wisdom, and provide a place where “seeing is believing”,
- Expand locally-led networks,
- Structure a statewide educational program on the importance of residue management,
- Perform water quality modeling for estimating pollutant load reductions, and,
- Prepare educational materials related to the social, agronomic, environmental, and economic aspects of residue management and other conservation practices.

The Iowa Learning Farm project, initiated in 2005, has established a unique partnership of farmers, state and federal agencies, conservation groups, the general public, and the research community. The Iowa Learning Farm is positioned to further the statewide, creative, visionary initiative that captures the attention of farmers and generates public awareness of this **Culture of Conservation** that supports continuing change for improved water and soil quality in Iowa and the nation.

Summary of Crop Year 2008 Work Plan

Water quality and watershed community outreach is one of the expanded priorities in year 2008 for the Iowa Learning Farm. In order to help meet the overall goals of the project and to meet the vision needs of Iowa Learning Farm 2009, we have also expanded Iowa Learning Farms to include the recruitment of 25+ conservation spokespeople across the state. We are adding winter meetings focused on water quality and watershed workgroups, winter field days and concentrated outreach to agribusiness leaders and expanded the overall outreach component. We will also begin a new collaboration with Dr. Lois W. Morton in sociology to expand our work on watershed issues and develop multiple strategies for solving environmental problems.

In order to best meet this expanded programming in 2008 and to transition to our vision for 2009, we will increase the project evaluators role and responsibilities to working with Dr. Morton and helping Project Coordinator Jerry DeWitt's day-to-day management and growth of the overall project. Comito's duties will expand to include on-campus coordination of project and among statewide partnering agencies and organizations. She will also help develop and nurture relationships with stakeholders and conservation leaders and report directly to Dr. DeWitt for overall ILF duties.

Research

- Agronomy – 30 statewide sites
- Economic – 30 statewide sites
- Water Quality – 5 sites with detailed modeling (detailed explanation in WQ work plan)



Outreach/Education

- 8 summer field days
- 2 winter “field days”/meetings
- 5 winter Water Quality Workgroups
- 40+ Conservation System Rainfall Simulator appearances, April-October 2008
- 4 ILF newsletters
- Monthly press releases
- Radio and public appearances
- Establish media relations with agriculture publication and mass media
- Website design, including farmer cooperators
- Presentations at other conferences/events
- Publications: factsheets, extension publications

Partnering

- NRCS winter meetings
- Agribusiness stakeholder endorsements – Jerry DeWitt
- Follow up communication with August 2007 stakeholder event attendees
- Recruitment of 25 ILF “spokespersons”, creation/fostering of local networks, utilizing partnership with CDI
- January 2008 ILF cooperator/spokesperson meeting with campus team in Ames
- Conferences and annual meetings
- Nurturing partners (community colleges, agricultural organizations, environmental organizations)

Evaluation

- Identify social and technical limitations in adopting in-field management practices to reduce sediment and nutrient loadings from agricultural lands.
- Evaluate producers’, stakeholders and watershed groups’ understanding of their watershed and the water quality impacts of in-field management practices;
- Appraise the strength and capacity of local communities to support strong water and soil conservation ethics and offer recommendations for intervention strategies to enhance local in-field water and soil quality management practices.

2008 Water Quality Component Work Plan

The overall goal of the water quality component is to establish an interactive knowledge sharing platform where researchers, extension personnel and producers work together to identify and implement the best in-field management practices to reduce sediment and nutrient loadings from Iowa’s agricultural lands. Since there is need to work with local producers, researchers and extension personnel participating in the Iowa Learning Farm project would generate the scientific information directly applicable to the representative producers’ local



fields. A second aspect of this project would focus on using the Conservation Systems Portable Rainfall Simulator (CSPRS) as an educational tool for dissemination of information related to the potential water quality impacts of agricultural practices not only to producers but also to educators and the general public. The proposed project would be implemented with the following specific objectives:

1. Inserting producers' wisdom and knowledge into hydrologic/water quality models to quantify sediment and nutrient loadings from local fields;
2. Assessing most effective in-field management practices to reduce sediment and nutrient loadings from agricultural lands;
3. Education of local producers, stakeholders and watershed groups relative to water quality impacts of in-field management practices.

We believe that educated producers and local watershed groups would help to spread the knowledge through neighbor-to-neighbor conversations related to water quality improvements using best in-field management practices.

Work element #1 – Water Quality Modelling

This work element would relate to objectives 1 & 2. As part of this we would work with the Iowa Learning Farm co-operators to provide input scenarios to be used in hydrologic/water quality models to evaluate various scenarios of in-field management practices to reduce sediment and nutrient loadings from agricultural lands. These scenarios would include various tillage practices, buffer systems, terraces, and various cropping practices including cover crops. Additional scenarios will be developed based on discussion with the ILF cooperators and partners. It is likely that some of these scenarios will take into consideration the emerging bioeconomy. With limited information available from local producers' fields, these models will be used to estimate the impact of selected scenarios of in-field management practices on transport of sediments and nutrients from producer's fields. The results of simulated scenarios will be presented to local farmers' groups and discussed to explore feasible and viable in-field management practices to reduce sediment and nutrient loadings from agricultural lands. Of note is that the producers' fields are located in watersheds with impaired water bodies listed on the 303d list (Attachment 1). As we work with local producers related to their management practices, we would be estimating the load reductions of sediment and nutrients that could be achieved with various management practices.

Work element #2 – Extension and Education

Information from work element #1 would then be used in local and regional meetings to educate a broader audience of producers, stakeholders and managers about the potential impacts that in-field management may have on downstream water quality both at a local and regional level including the Upper Mississippi River Basin water quality and Gulf of Mexico Hypoxic Zone.



Another major education and outreach efforts would be use of the Conservation Systems Rainfall Simulator trailer (Attachment 2) to demonstrate the impacts of various in-field management scenarios on sediment and nutrient loadings from agricultural lands. We plan to work with the Iowa Learning Farm project coordinator and communication specialists to identify events where the CSPRS can be used throughout the state during the summer months (May through August). We would use CSPRS at local education events one of which may be county fairs where the visibility of the project can be enhanced and where we can provide educational opportunities on the water quality impacts of in-field management practices. We anticipate use of the CSPRS at 2-3 events per week during a 14-week summer period. At these educational and outreach events, we will highlight whether the local area is near a 303(d) Impaired Water Body, discuss why it may be on this list, and potential efforts to address the impairment. A goal is to better educate stakeholders about water quality in their area.

Project Outcomes

We would develop appropriate educational materials for use at the regional meetings and local education events, drawing upon the modeling work associated with work element #1. The simulated case studies of local producers' fields would be integrated into educational material about in-field management practices to improve water quality. We believe that activities under work element #2 would greatly contribute to the overall goal of education of local producers and watershed groups relative to water quality impacts of in-field management practices.

The project's objectives and associated tasks would contribute to the following results and benefits:

- Establishment of a knowledge sharing platform between researchers, extension personnel and producers to reduce sediment and nutrient loadings from Iowa's agricultural lands;
- Development and demonstration of a cost-effective approach combining hydrologic modeling with limited field information to estimate sediment and nutrient loads from agricultural landscapes;
- Increased knowledge of the impact of various in-field management practices on sediment and nutrient export from local fields and loading to receiving water bodies; and
- Transferring/sharing of outcomes with local producers, stakeholders, and watershed groups to improve water quality in Iowa's agricultural landscapes.

Resource Assumptions:

- The ILF project coordinator and communications specialist will assist in identifying and scheduling events where the CSPRS can be used.



2008 ILF Work Plan

- Evaluation of project efforts and effectiveness of project message and interaction with stakeholders will occur as part of the overall Learning Farm project.
- The overall Learning Farm project will provide support for outreach publications that contribute to the overall project goals.

2008 Agronomic Component Work Plan

The goals of the agronomic component are to demonstrate conservation practices on a field scale to increase implementation in surrounding areas and ultimately improve soil and water quality. Data collected at each site and intensive data collected at select sites within each region will be used to validate the improvements to soil and water quality made by various conservation systems. This data will be utilized in outreach activities such as field days, newsletters, publications, the project website, fact sheets, workshop presentations, distribution to project cooperators to utilize in fine tuning their systems, and other media outlets. Cooperators will engage their neighbors by discussing their experiences in implementing conservation practices and serve as a local resource for those interested in conservation practices.

Work Elements

Data Collection

- Build a **Culture of Conservation** that strengthens our individual and collective commitments to a set of values, beliefs, and attitudes about the centrality of natural resources to our standard of living and quality of life,
- Continue data collection from 30 sites that were established in 2005 and 2006. The demonstration sites were selected within each region by considering soil uniformity in comparing different cropping and tillage systems. The demonstration sites in all regions will demonstrate various conservation practices in a paired approach with different practices within each location to compare the impacts of the practices.
- Detailed soil measurements for soil quality and system performance will continue to include bulk density, soil compaction, aggregate stability, infiltration rate, soil carbon, microbial biomass, and total N. Each of these parameters will be determined every year on a subset of the selected sites in the project within each region.
- The detailed soil measurements will be used to calculate the Soil Conditioning Index and RUSLE2 to further demonstrate changes in soil quality and soil loss when comparing agronomic systems.
- Seeding rate, surface residue estimation, seedling emergence, final plant population, and grain yield will continue to be collected yearly on all sites included in the project.



2008 ILF Work Plan

- Measurements of late spring nitrate, fall stalk nitrate test, and grain N and P uptake will be taken on a limited basis to support nutrient utilization as a part of the CSP. This data will be used in P-Index and nutrient management modeling.

Outreach

- Collaborate with the ILF communications specialist and ILF Field Coordinator to prepare agronomic data and information for outreach materials, field days, publications, the ILF website and news letter, and other forms of media.
- Present agronomic data and information at each 2008 ILF field day.
- Organize data for each site in a simple format for each site and share with respective cooperators of each site. These data will be also be posted on the ILF website by county within each region for public use.
- Communicate project information and data collection results to ISU extension staff, consultants, agency staff, and other agriculture professionals through ISU Extension Crop and Soils Clinics, Integrated Crop Management Conference, the Crop Advantage Series, and many other state-wide conferences and workshops.

Agronomic Component Outcomes:

- Increase implementation of no-tillage, reduced tillage, and alternative cropping systems through communication with local producers in each of the 5 regions.
- Production of fact sheets based on the data collected from 30 sites to document the best conservation practices for improving soil and water quality.
- Develop power point presentations that can be utilized for regional training events by farmers and field agronomists.
- Present the ILF concept to community colleges (i.e., Grand View College)
- Conduct training sessions on conservation systems and soil and water quality during the NRCS/SWCD annual regional and county activities.

Resource Assumptions:

- Evaluation of project efforts and effectiveness of project message and interaction with stakeholders will occur as part of the overall Learning Farm project.
- The overall Learning Farm project will provide support for outreach publications that contribute to the overall project goals.

2008 Economic Component Work Plan

Continued economic assessment of the field demonstrations during the project is crucial to evaluate the effectiveness of conservation systems for



different regions. Over the past decade there have been numerous changes in tillage technologies, agronomic technologies, and nutrient management. Therefore, there is a need to update the economic assessments for tillage and cropping systems in order to have a better handle on how different conservation management systems affect profitability. The economic assessment will be more than a 'per-acre' returns on investment, but rather a cost-benefit analysis based on a systems approach. 2008 work plan includes:

- Continue collection and analysis of costs of production and returns for cooperators
- Continue analysis of available practices for energy and erosion impacts
- Use economic analysis to evaluate a suite of potential practices to reduce erosion
- Evaluate land ownership and its relation to potential use of conservation practice

2008 Sociological/Evaluation Component Work Plan

In order to help meet the overall goals of the project, the following outlines the work plan for the **social science/evaluation component** of ILF for 2008:

1. Coordinate the development of outreach and education material that uses a social action model to renew commitment to conservation ethics and helps build a culture of conservation in Iowa. Guiding Iowans, starting with Iowa's farmers, to making choices that lead to a cleaner, healthier environment and thus improving our quality and standard of life. This is an important step toward making Iowa a cleaner, greener, healthier place to live with increased water and soil quality a primary goal of the Iowa Learning Farm Project. Such a goal will require multi-strategy approach, many local and state stakeholders, unique outreach and education events and multi-media educational and outreach materials that appeals to many different audiences.
2. Dr. Lois W. Morton is joining the sociology team to develop better means of outreach in issues of citizen action and water quality in Iowa. Morton heads several projects throughout the state and we will be using her material to help other begin similar watershed and water quality action groups.
3. Recruiting & Training ILF Conservationists. The overall goal is to add 25 conservationists to ILF team in 2008. These people will be chosen through the help of our partnerships. Conservationists will be paid a \$50 honorarium or mileage per "event" at which they represent ILF and conservation in their communities. We will have regional meetings to assist in their recruitment and training. We will launch the spokesperson campaign at the Iowa Soil and Water Conservation District



2008 ILF Work Plan

Commissioners Annual Conference in late November 2007.

4. Regional NRCS staff meetings. The purpose of these meetings is to understand from NRCS perspective where the state is at in terms of conservation practices on the land. NRCS is a key partner in many ILF events and these 5 regional meetings will help us strengthen this partnership.
5. Five winter Water Quality workgroups: January & February 2008. The focus of these meetings will be water quality. Preliminary plans are that these additional meetings will be coordinated with Matt Helmers. The objective of these producers' meetings will be to build on the existing ILF networks and to more clearly understand the local "team's" understanding of the linkages between the use of conservation systems and water quality (i.e. linking what is done on the land to surface water quality). These meeting also will help to restore the "art of neighboring". When people know each other, share each other's stories, they truly begin to communicate, trust and cooperation begins to emerge. These gatherings will be summarized and the information used to better inform future ILF programming and outreach.
6. Continue to interview and meet with ILF farm cooperators for the purpose of evaluating their roles with the project and better understand their roles and needs and to enlist their help in being spokespeople for conservation.
7. January 2008 – ILF team workshop. In March 2007 we held our first ILF team workshop. Building on the success of the March 2007 meeting, the January 2008 cooperator workshop meeting's objective is to expand the current cooperator network more fully so that they can continue to more fully encourage the adoption of conservation systems in their communities. As with the March 2007 meeting, we expect the workshop to be well attended and that the discussions will be informative and engaging. The workshop will utilize select ILF team members as presenters and farmer cooperators will shared what they are doing on their farms and the challenges and barriers they face in reducing erosion and water pollution. We will also introduce the new ILF Conservationist to the group and have breakaway sessions for their training and discussion. For 2008, we will continue to build upon the successful ILF team workshop by coordinating activities where ILF cooperators are educators and leaders in their communities.
8. Evaluation of the project continues to be the responsibility of the social science component and will continue to be on going throughout the remainder of the project. The discussion groups will continue to enable us to introduce ILF cooperators in the regions to each other, to other local producers and local stakeholders interested in improving Iowa's water quality. It is our objective that the conversations concerning the participants' experiences and observations about the project activities



(modeling, outreach and education) in their area will help the ILF team plan their activities for 2008 including field days, workshops, as well as the overall approach to the project and use of the Conservation Systems Rainfall Simulator.

Evaluation of ILF

Evaluation of current materials from the project and delivery modes in terms of affecting change will continue. Some key questions are: Do the ILF message appeal to the broad range of stakeholders and audiences?; Are ILF messages sufficient to motivate action and change?; What are the most effective types of messages?; and What are the most efficient means to reach producers and other stakeholders? Evaluation will occur on multiple levels:

- a. Interviews with participating producers to weigh the value and strength of their participation in conservation tillage system adoption, the water quality model development and outreach;
- b. Event evaluations of any event that ILF team members participate. These forms will help us understand the audience's level of engagement and help us to improve future outreach activities;
- c. Phone/mail evaluations of participants in any "field" event sponsored as a part of the project. These interviews will occur within two weeks of attendance. Interviews will focus on the clarity and accessibility of the information received and inquiry into whether participants planned to make any changes in their land management as a result of the event.
- d. A series of workgroups throughout the state that will provide input into programming needs and serve in an advisory role for the project. We will continue to utilize the workgroups that have already been established as part of the ILF project. We will use the input from these groups to develop a list of land use scenarios for different regions of the state that would be used for modeling the estimated field-scale water quality. Following this approach, participants would have input into the direction of the project. The workgroups will involve ILF cooperators, local stakeholders, the ILF evaluation team, and certain members of ILF advisory team throughout the state. The community/stakeholder groups will involve, among other individuals, farmers having varying types of production operations and persons involved in conservation, conservation-related, farm, and civic organizations. The workgroup conversations will occur annually throughout the duration of the project. Although the expressed purpose of these conversations is to provide understanding and guidance to the Iowa Learning Farm project, a potential spin-off is for members, individually or collectively, to become more active advocates for water and soil conservation outcomes in their respective organizations and communities.



The following are the general goals of assessments for the project evaluation:

- Identify social and technical limitations in adopting in-field management practices to reduce sediment and nutrient loadings from agricultural lands.
- Evaluate producers', stakeholders and watershed groups' understanding of their watershed and the water quality impacts of in-field management practices;
- Appraise the strength and capacity of local communities to support strong water and soil conservation ethics and offer recommendations for intervention strategies to enhance local in-field water and soil quality management practices.

2008 Communications & Outreach Plan

Field Coordinator

The Field Coordinator supports and aid all the other components plan of work throughout the year.

What makes the Iowa Learning Farm unique is that it brings together various academic disciplines, agencies and farmers, integrates their knowledge and wisdom into a statewide communications strategy to distribute information to a broad audience. The field coordinator is partially responsible for increasing the visibility of the ILF project. Through monthly ILF team meetings, quarterly ILF steering committee meetings and personal contact, he works closely with the project team to develop integrated outreach and education programming and materials. The Field Coordinator continues coordination of ILF field activities and rainfall simulator events. The field coordinator has specific responsibilities for increasing the visibility of the project throughout the state and in particular working with the cooperators to develop their ability to become spokespeople in their local communities for the importance of conservation.

Over the past two and half years, we have established good working relationships with the local NRCS and DSC staff. We hope to build on these local networks as we expand our outreach and education. The field coordinator will help ILF team integrate information from the four components to develop educational and outreach material specifically targeted to various groups and stakeholders. First and foremost this information will be packaged in a way that will be useful to local stakeholders, including our farmer cooperators, local NRCS and DNR staff, Soil and Water District commissioners, and ISU Extension field crop specialists. In addition, educational materials will be developed for educators throughout the state.

Communication/Outreach Plan

This plan is a guide for developing ways to reach target audiences, for guiding decisions for best use of Iowa Learning Farm staff time and resources, and for focused communication with key audiences.



Audience A: Iowa farmers/producers, general public

Messages: Educate about the ILF project in general, and to help Iowans have an active role in protecting and enhancing Iowa's natural resources

Objective: Target news media that this group relies on for information to increase awareness of the ILF project.

Strategy 1: Establish media relations with agriculture publications and mass media in the state.

Action 1: Meet with new editors at IFB *Spokesman*, and *Farm News*. Meet with other news contacts including: Rod Swoboda (*Wallaces Farmer*), Jerry Perkins (*Des Moines Register*), Kevin Blind (*Iowa Farmer Today*), Doug Cooper (*WOI Radio*), Mark Pearson/Bob Quinn (*WHO Radio*) and others. Schedule personal meetings to introduce communications specialist and the ILF project.

Action 2: Release news article to news media one per month, at minimum. Write and distribute timely topical news article to Iowa media (paper, radio, web). This topic would be in conjunction with "Conservation Minutes."

Action 3: Restart "Conservation Minutes" radio program, but use more than one voice. Coordinate speaker and topic with news release.

Strategy 2: Redesign and expand ILF website so it becomes a resource for farmers and cooperators to go for conservation and water quality information. Design should reflect the theme "Culture of Conservation."

Action 4: Add cooperator profiles and contact information; post news releases and "Conservation Minutes."

- Add second tier of cooperators as they come on board.
- Add the component to record number of hits to the site.

Strategy 3: Support event planning including field days (8), & winter meetings (2).

Action 5: Work with field coordinator in event planning and publicity for events, including invitations, media announcements.



Strategy 4: Develop material (print and electronic) to support education efforts of ILF team and agency representatives.

Action 6: Develop a series of eight fact sheets for producers looking for information on key topics (could coincide with monthly news release), including a general info sheet on ILF project.

Action 7: Develop a PowerPoint presentation that explains the ILF project in general. Team members and representative agencies will have access to the file for use at presentations, conferences, etc.

Audience B: Agencies, organizations, and agribusiness including partners (IDALS, NRCS, DNR, CDI, Farm Bureau)

Messages: The ILF project is Building a Culture of Conservation, changing minds of Iowans to improve soil and water quality.

Objective: To position the ILF as a source of information and to demonstrate a working relationship with these funders/partners.

Strategy 1: Communicate with appointed/selected representatives of these organizations on a regular basis with information about ILF.

Action 1: Distribute quarterly newsletter, via mail and/or electronically.

Action 2: Work with field coordinator and project coordinator, offering ILF as a program topic at regional/district/board agency meetings and provide appropriate support material.

Strategy 2: Help support communication efforts of agencies or groups

Action 3: Work with marketing efforts on particular campaigns including: residue management, cover crop working group, Dry Creek Watershed group, CIG, etc.

Audience C: New ILF Spokesperson Cooperators

Messages: Educate about the ILF project and to help Iowans have an active role in protecting and enhancing Iowa's natural resources

Objective: ILF project awareness and general information so spokespersons can, in turn, present to audiences.

Strategy 1: Meet with spokesperson cooperators to educate about project.

Strategy 2: Create and provide print/electronic material for their presentations.



Audience: ISU Extension Field Staff

Messages: The ILF project is Building a Culture of Conservation, changing minds of lowans to improve soil and water quality.

Objective: To position the ILF as a source of information about conservation and innovative farming practices that improves soil and water quality.

Strategy 1: Explore how the ILF can work with CEEDs, Field Agronomists, Ag Engineers, and Farm Management Field Specialists

Action 1: Coordinate meeting between Jerry DeWitt and Ag Administration (Dean Wintersteen, Joe Colletti, Jerry Miller, Paul Brown) to present the ILF project and its goals.

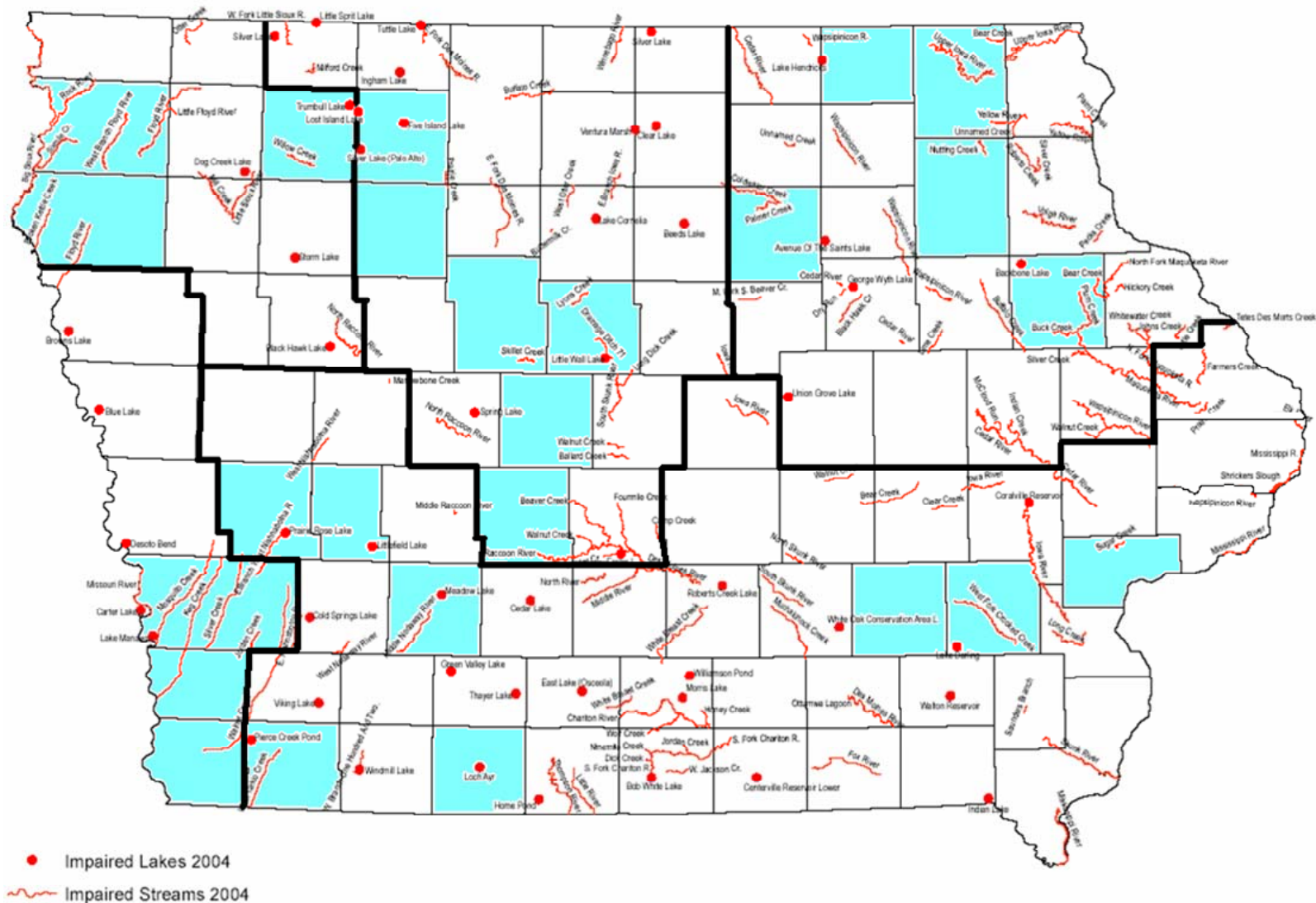
Action 2: Work in conjunction with Field Coordinator and ILF agronomists to provide awareness of the project, website and support materials at annual conferences and bi-annual training.

Contact Person:

Jerry DeWitt, Director
Leopold Center for Sustainable Agriculture
209 Curtiss Hall, Iowa State University
Ames, IA 50011
Phone: 515-294-7836
E-mail: jdewitt@iastate.edu

Total Project Funding Requested Crop Year 2008: \$445,301

Total Section 319 Funding Requested Crop Year 2008: \$98,000



Attachment 1: A map of Iowa's 303(d) impaired water bodies. ILF Cooperating Producers are Located in Shaded Counties, and Five Regions of the State are Outlined in Bold



**Iowa Learning Farm
Conservation Systems
Portable Rainfall Simulator**



Attachment 2: ILF Conservation Systems Portable Rainfall Simulator